## WHAT IS CLAIMED IS:

1. A measurement data generating method applied to a system for observing a ground based on various data items measured at one or more observation points by at least one measuring instrument, the method comprising the steps of:

collecting the measured data items in a collection center; and

generating measurement data for users, which is obtained by editing the measured data items according to contract conditions for each user.

- 2. The method according to claim 1, wherein the generating step comprises the step of generating measurement data for users, which is obtained by editing the measured data items according to contract conditions for each user on condition that each of the at least one measuring instrument does not malfunction.
- 3. The method according to claim 1, wherein the generating step comprises the steps of:

determining whether at least one of the measured data items is abnormal based on expert knowledge;

giving a re-measurement instruction to a corresponding measuring instrument in a case where the at least one of the measured data items is abnormal; and

generating measurement data for users, which is obtained by editing the measured data items according

10

5 .

15

20

to contract conditions for each user in a case where it is determined that the corresponding measuring instrument does not malfunction as a result of re-measurement.

4. The method according to claim 1, wherein the generating step comprises the step of generating measurement data for users, which is obtained by hierarchically grouping the measured data items according to contract conditions for each user.

5. The method according to claim 1, further comprising the steps of:

checking an operation of each measuring instrument by the measured data items in a data management section before the measured data items are collected in the collection center; and

sending the measured data items to the collection center after it is confirmed that the measured data items are normal by the checking.

- 6. The method according to claim 5, further comprising the step of giving a re-measurement instruction to a corresponding measuring instrument in a case where at least one of the measured data items is abnormal.
- 7. A measurement data generating apparatus applied to a system for observing a ground based on various data items measured at one or more observation points by at least one measuring instrument, the

10

15

25

apparatus comprising:

collecting means for collecting the measured data items in a collection center; and

generating means for generating measurement data for users, which is obtained by editing the measured data items according to contract conditions for each user.

- 8. The apparatus according to claim 7, wherein the generating means comprises means for generating measurement data for users, which is obtained by editing the measured data items according to contract conditions for each user on condition that each of the at least one measuring instrument does not malfunction.
- 9. The apparatus according to claim 7, wherein the generating means comprises:

means for determining whether at least one of the measured data items is abnormal based on expert knowledge;

means for giving a re-measurement instruction to a corresponding measuring instrument in a case where the at least one of the measured data items is abnormal; and

means for generating measurement data for users, which is obtained by editing the measured data items according to contract conditions for each user in a case where the corresponding measuring instrument does not malfunction as a result of re-measurement.

10

5

15

20

- 10. The apparatus according to claim 7, wherein the generating means comprises means for generating measurement data for users, which is obtained by hierarchically grouping the measured data items according to contract conditions for each user.
- 11. The apparatus according to claim 7, further comprising:

means for checking an operation of each measuring instrument by the measured data items before the measured data items are collected in the collection center; and

means for sending the measured data items to the collection center after it is confirmed that the measured data items are normal by the checking.

12. The apparatus according to claim 11, further comprising means for giving a re-measurement instruction to a corresponding measuring instrument in a case where at least one of the measured data items is abnormal.

10

5